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Report On Business®

Economic Decline Eases in February; PMI Rises to 48.3%

FEBRUARY REPORT

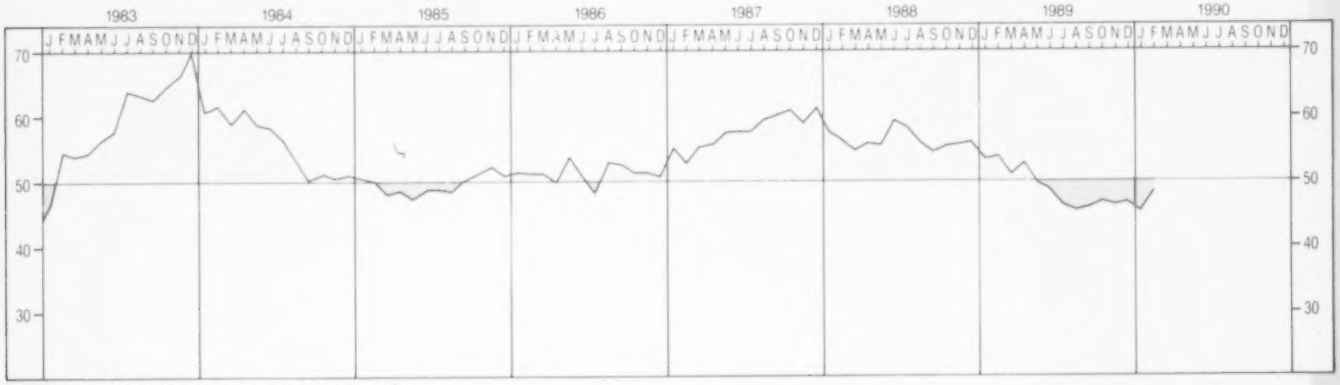
Analysis by the National Association of Purchasing Management Business Survey Committee; chair, Robert J. Bretz, C.P.M., director of materials management, Pitney Bowes, Inc.

The economy declined in February for the 10th consecutive month, but at the lowest rate of decline since June 1989, say the nation's purchasing executives in their latest **Report on Business.** New Orders increased for the first time since May 1989. Production also registered an increase for the first time since June 1989. Both New Export Orders and Imports continued to show increases. Employment declined for the 12th consecutive month, although the rate of decline was the lowest since June 1989.

Supplier Deliveries (formerly Vendor Deliveries) were faster for the 10th consecutive month at a significantly greater rate than in January 1990, when many shortages developed as a consequence of the record cold weather experienced in December. The improvement in Supplier Deliveries was reflected in Inventories, which declined for the 15th consecutive month at the greatest rate of decline since December 1986. Prices declined for the ninth consecutive month at the greatest rate since December 1982 and a significant decline from January 1990, when the shortages and slower deliveries resulting from the severe weather conditions in December caused many prices to rise.

The **Report** was issued by Robert J. Bretz, C.P.M., chairman of the National Association of Purchasing Management's Business Survey Committee, and director of materials management at Pitney Bowes, Inc. Said Bretz, "The manufacturing economy declined in February, however, the rate of the decline was the lowest in eight months. Although the first increases registered in Production and New Orders since mid-1989 are encouraging, the continued improvement in Supplier Deliveries and significant decline in Prices suggests a lack of any underlying strength in the economy."

PURCHASING MANAGERS' INDEX



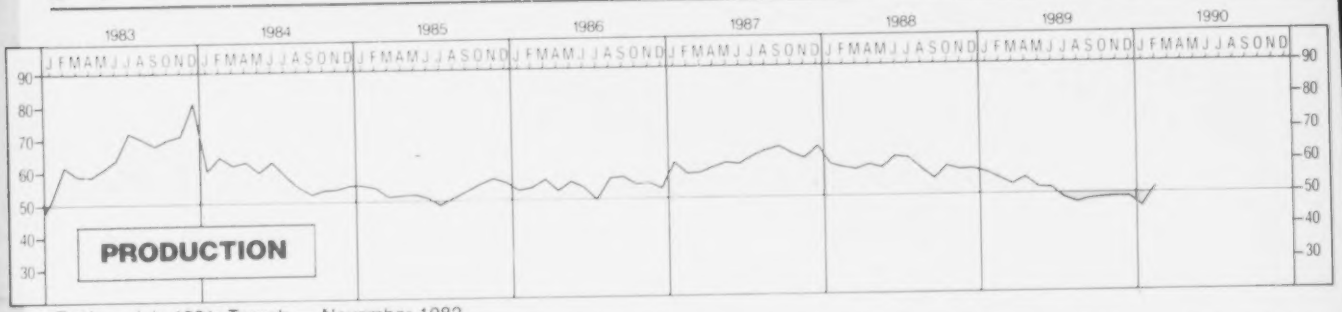
Peak — July 1981; Trough — November 1982

PURCHASING MANAGERS' INDEX (PMI)

February '89	53.7	September '89	46.0
March '89	51.0	October '89	46.9
April '89	52.7	November '89	46.4
May '89	49.8	December '89	46.7
June '89	48.8	January '90	45.2
July '89	46.2	February '90	48.3
August '89	45.5		

The **Purchasing Managers' Index** (PMI) rose to 48.3% in February, up from 45.2% in January. Although February is the 10th consecutive month of decline, the 48.3% reading is the highest since June 1989 (48.8%). A reading below 50 indicates that the manufacturing economy is generally declining; above 50, that it is generally expanding. Bretz added, "Although the increase of over three points in the PMI from the low January level looks impressive, it appears that much of the improvement is attributed to the additional production required to make up for weather-related production curtailment in December and early January, and the severe auto industry cutbacks in January."

BUSINESS



Peak — July 1981; Trough — November 1982.

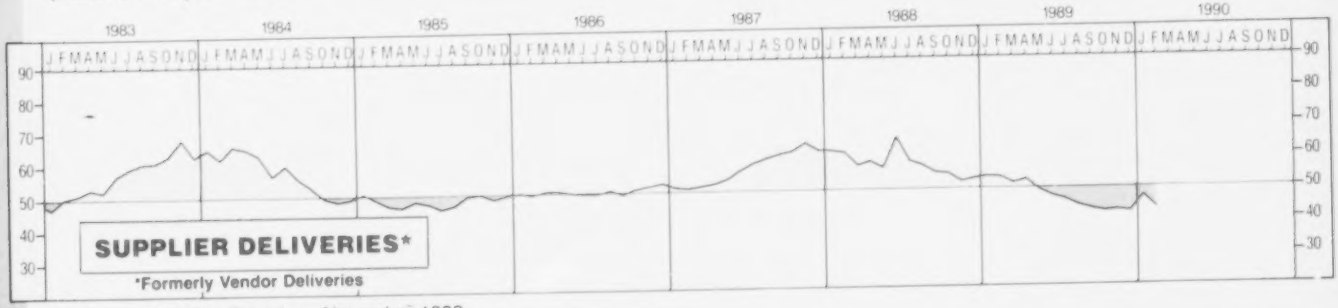
Production increased in February for the first time since mid-1989. The Production Index rose to 51.5%, up sharply from 45.4% in January and the highest since June 1989 (51.5%). The significant improvement from January appears to be a correction from much lower production activity in January, particularly in the auto industry and industries affected by severe cold weather conditions during the coldest December in recorded U.S. history.

Production	%Better	%Same	%Worse	Net	Index
February	27	53	20	+ 7	51.5
January	18	56	26	- 8	45.4
December	17	58	25	- 8	48.4
November	19	56	25	- 6	48.4

Peak — July 1981; Trough — November 1982.

New Orders increased in February for the first time since they declined in June 1989. The New Orders Index rose to 51.8%, up from 45.8% in January. The sharp increase appears to reflect a rebound from the severe reductions in auto production in January and weather-related problems during December.

New Orders	%Better	%Same	%Worse	Net	Index
February	29	48	23	+ 6	51.8
January	23	50	27	- 4	45.8
December	17	56	27	- 10	49.4
November	20	52	28	- 8	48.2



Peak — July 1981; Trough — November 1982.

Supplier Deliveries were faster in February for the 10th consecutive month. The Supplier Deliveries Index fell to 43.3% in February, down significantly from January (47.2%). The improvement from last month reflects the increased production in February and fewer shortages than in January which resulted from the extreme cold weather in December.

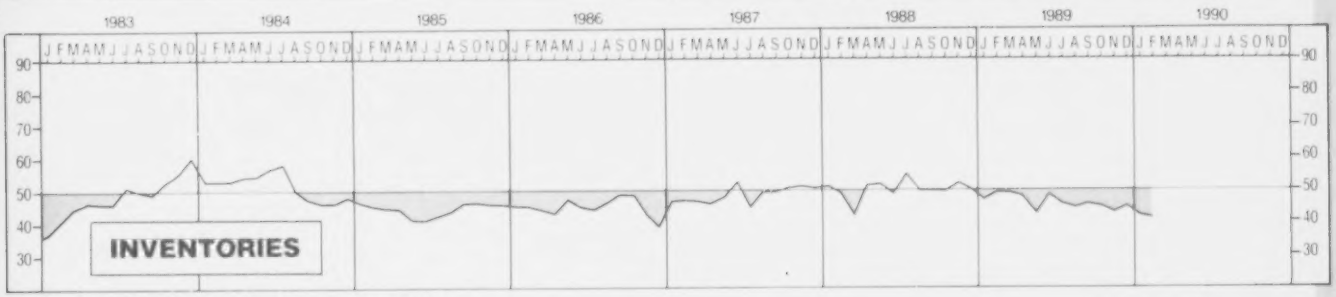
Supplier Deliveries	%Slower	%Same	%Faster	Net	Index
February	3	80	17	- 14	43.3
January	7	82	11	- 4	47.2
December	4	78	18	- 14	42.5
November	5	75	20	- 15	43.0

IN SHORT SUPPLY

Bearings — 19th consecutive month, a consequence of anti-dumping suits. **Castings** — 14th time in 18 months. **Electric Motors** — 6th time in 11 months. **Acrylic Acid** — 17th time in 20 months (used in manufacturing plastics). **Caustic Soda/Soda Ash** — 33rd consecutive month (used heavily in paper-making, petroleum refining and soap-making). **Hydrogen Peroxide** — 3rd consecutive month (increasing demand exceeding supply because of switching from chlorine use by paper makers to avoid dioxins, used as a bleaching agent and, in solution, as a topical cleansing agent and antiseptic). **Sodium Chlorate** — 9th consecutive month (increasing demand exceeding supply because of switching from chlorine use by paper makers to avoid dioxins, used heavily in paper-making and dyeing). **Titanium Dioxide** — 31st consecutive month (increasing demand exceeding supply because of switching from chlorine use by paper makers to avoid dioxins, a lead-free pigment used as a whitener in coatings, paints, paper and other industrial applications). **Polyethylene Resins** — Primarily as a consequence of an explosion at Phillips Petroleum plant reducing about 8% of U.S. polyethylene resin output until mid-1990 (used heavily in making packaging materials and paper coatings).

UP IN PRICE

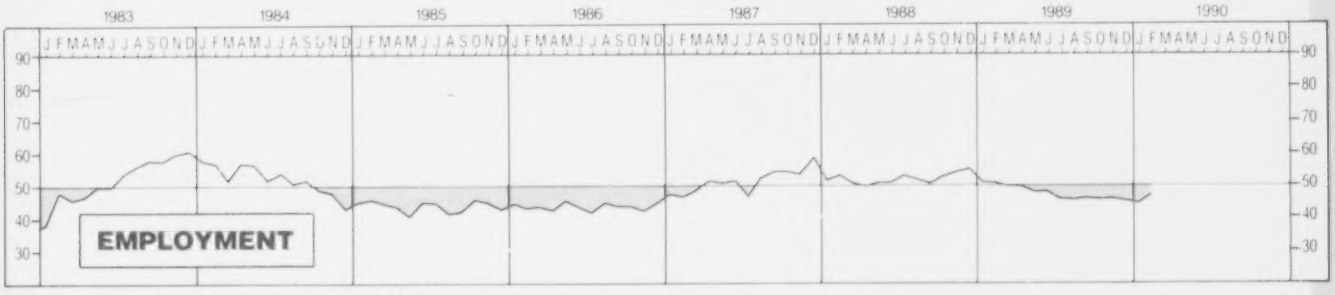
Rhodium — 2nd consecutive month (used heavily as an alloy with platinum and as a corrosion-resistant electroplate for protection of silverware from tarnishing). **Caustic Soda/Soda Ash** — 39th consecutive month, primarily as a consequence of lower demand for co-produced chlorine by paper-makers (used heavily in paper-making, petroleum refining and soap making). **Methanol** — 2nd consecutive month (used heavily as a solvent and in synthesizing other chemicals). **Toluene** — Used heavily in making explosives, dyes, and benzoic acid; as a solvent in paint, and as a gasoline additive. **Freon** — 4th consecutive month (used as a refrigerant). **Polystyrene** — Used chiefly in making synthetic rubber, plastic resins and plastic. **Coal**. **Corn**



Peak — July 1981; Trough — November 1982.

Inventories declined in February for the 15th consecutive month. The Inventories Index fell to 40.8%, down from 41.8% in January, and the lowest since December 1986 (38.4%).

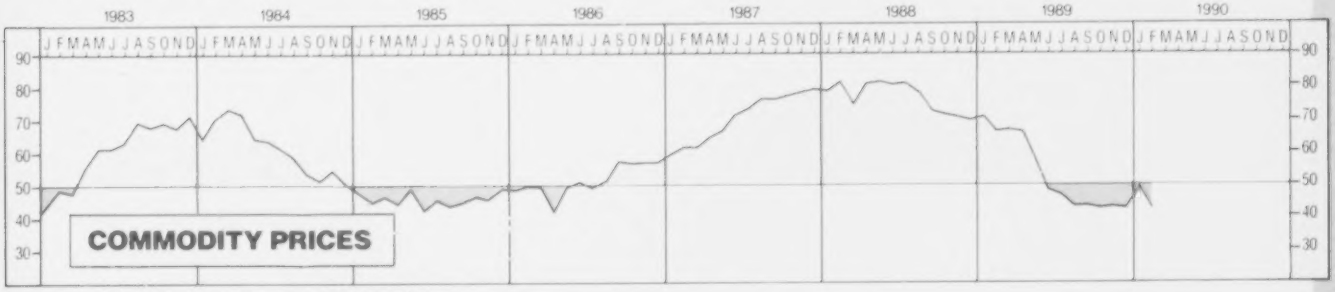
Inventories	%Higher	%Same	%Lower	Net	Index
February	18	50	32	-14	40.8
January	14	56	30	-16	41.8
December	15	55	30	-15	44.5
November	13	53	34	-21	42.8



Peak — July 1981; Trough — November 1982.

Employment declined for the 12th consecutive month in February, but at the lowest rate since mid-1989. The Employment Index rose to 46.7% in February, up from 44.1% in January, and the highest since June 1989 (47.7%). A number of members continued to report layoffs, hiring freezes and early retirement programs.

Employment	%Higher	%Same	%Lower	Net	Index
February	11	69	20	-9	46.7
January	8	71	21	-13	44.1
December	8	69	23	-15	44.9
November	12	65	23	-11	45.4



Peak — July 1981; Trough — November 1982.

Prices declined in February for the ninth consecutive month. The Price Index fell to 42.2%, down sharply from 49.7% in January and the lowest since December 1982 (39.1%), which was the beginning of our current economic recovery. All of the items, which were reported higher priced in January because of weather-related shortages, are on the February list of items reported down in price.

Prices	%Higher	%Same	%Lower	Net	Index
February	13	59	28	-15	42.2
January	24	56	20	+ 4	49.7
December	10	63	27	-17	42.7
November	10	64	26	-16	43.1

Products — Corn starch (used heavily in both food processing and paper making) and corn sweeteners (used in food processing).

DOWN IN PRICE

Aluminum — 11th consecutive month; **Aluminum Products** — 4th consecutive month; **Brass**; **Copper** — 4th consecutive month; **Nickel** — 9th consecutive month (used heavily in making stainless steel, plating metals and batteries); **Steel** — 6th consecutive month; **Steel Scrap** — 4th consecutive month; **Stainless Steel** — 3rd consecutive month, after being reported up in price for the 15th time in 20 months in July 1989; **Zinc** — 9th time in 10 months (used heavily in metal alloys and as a protective coating for metal); **Corrugated Shipping Containers**; **Printing Paper** — 7th time in 8 months; **Acetic Acid** — Used in making various acetates, plastics and rubber in tanning, a preservative in foods and a solvent for gums, resins, volatile oils, etc.; **Benzine** — After being reported up in price for 3rd consecutive month in December 1989 (used heavily in making medicinal chemicals, dyes, varnishes, lacquers and resins); **Chlorine** — 6th time in 11 months, primarily a consequence of lower demand by paper-makers switching to alternatives to avoid dioxins while demand for co-produced caustic soda continues (used heavily in bleaching paper and fabrics; purifying water; and, in making synthetic rubber, plastics and other chemicals); **Ethylene Glycol** — Used heavily in making antifreeze, brake fluid, plastic paint and ink; **Ethylene Derivatives** — 3rd consecutive month; **Plastic Resins** — 2nd consecutive month (used in making plastic products); **Rubber**; **Gasoline** — After being reported up in price in January 1990; **Diesel Fuel** — After being reported up in price in January 1990; **Fuel Oil** — After being reported up in price in January 1990 for 4 consecutive months; **Natural Gas** — After being reported up in price in January 1990 for 4 consecutive months; **Propane** — After being reported up in price in January 1990; **Eggs**.

Report On Business®

BUYING POLICY

Lead times for Production Materials shortened slightly in February. The number of purchasers reporting lead times of 60 days or less rose to 85%, up from 83% in January.

Lead times for Capital Expenditures in the important six months or longer category was unchanged (51%) in February. However, the number of members reporting lead times of 60 days or less rose to 34% from 32% in January.

Lead times for Maintenance, Repair, and Operating (MRO) Supplies shortened in February. The number of members reporting lead times of 30 days or less rose to 89% up from 86% in January.

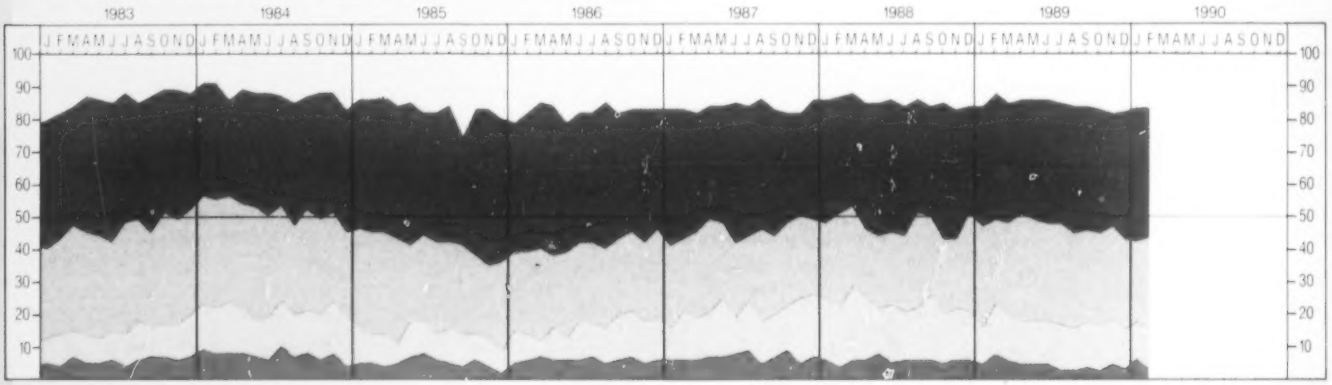
PERCENT REPORTING

Production Materials	Hand to Mouth	30 Days	60 Days	90 Days	6 Mos. and Longer
February	17	40	28	12	3
January	17	41	25	11	6
December	17	40	27	13	3
November	18	35	28	14	5

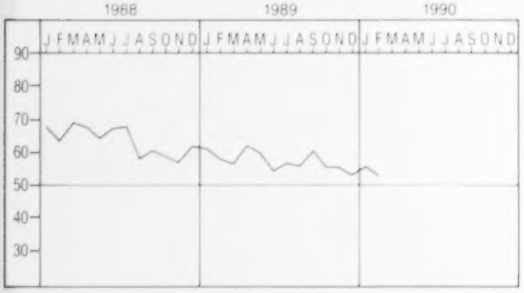
Capital Expenditures	Hand to Mouth	30 Days	60 Days	90 Days	6 Mos. and Longer
February	10	8	16	15	51
January	11	8	13	17	51
December	11	6	15	18	50
November	11	7	13	17	52

MRO Supplies	Hand to Mouth	30 Days	60 Days	90 Days	6 Mos. and Longer
February	42	47	8	1	2
January	41	45	11	2	1
December	42	48	7	3	0
November	42	43	12	2	1

PRODUCTION MATERIALS

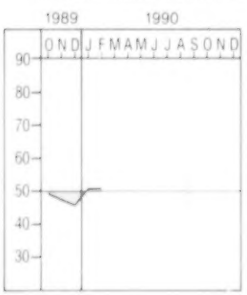


NEW EXPORT ORDERS



New Export Orders continued to show relatively strong growth in February. The number of members exporting (71%) is slightly higher than the overall average of 1989 (70%). The New Export Order Index fell to 53.0% in February, down slightly from 55.5% in January. The overall average of the index for all of 1989 was 57.5%.

NEW IMPORTS



Imports increased in February for the second consecutive month. The Imports Index (not seasonally adjusted) in February (50.5%) was unchanged from January and remains the highest in the five-month history of the index. The 77% of members importing in February was down somewhat from 82% in January, but within the average for the past four months.

	%Better	%Same	%Worse	Net	Diffusion Index	%Exporting
February	14	78	8	+ 6	53.0	71
January	17	77	6	+ 11	55.5	73
December	15	76	9	+ 6	53.0	72
November	16	79	5	+ 11	55.5	69

	%Better	%Same	%Worse	Net	Diffusion Index	%Exporting
February	12	77	11	+ 1	50.5	77
January	12	77	11	+ 1	50.5	82
December	5	81	14	− 9	45.5	78
November	8	78	14	− 6	47.0	76

DATA AND METHOD OF PRESENTATION

The **Report on Business** is based on data compiled from monthly replies to questions asked to purchasing executives in over 300 industrial companies. Membership of the Business Survey Committee is diversified geographically, based on value added by state, and by Standard Industrial Classification (SIC) category, based on each industry's contribution to Gross National Product (GNP). Twenty industries in 50 states are represented on the committee.

Survey responses reflect the change, if any, in the current month compared to the previous month. For each of the indicators measured (New Orders, New Export Orders, Imports, Production, Supplier Deliveries (formerly Vendor Deliveries), Inventories, Employment and Prices), this report shows the percentage reporting each response, the net difference between the number of responses in the positive economic direction (higher, better and slower for Supplier Deliveries), and the negative economic direction (lower, worse and faster for Supplier Deliveries), and the diffusion index.

Responses are raw data and are never changed. The diffusion index includes the percent of positive responses plus one-half of those responding the same (considered positive). The resulting single index number is then seasonally adjusted to allow for the effects of repetitive intra-year variations resulting primarily from normal differences in weather conditions, various institutional arrangements and differences attributable to non-moveable holidays. All seasonal adjustment factors are supplied by the U.S. Department of Commerce and are subject annually to relatively minor changes when conditions warrant them. A sufficient history is not yet available for the New Export Orders and Imports Indexes to determine seasonal adjustment factors. Therefore, these two indexes are not seasonally adjusted. The Purchasing Managers' Index (PMI) is a composite index based on the seasonally adjusted diffusion indexes for five of the indicators (New Orders, Production, Supplier Deliveries, Inventories and Employment) with varying weights applied.

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change and the scope of change. An index reading above 50% indicates that the economy is generally expanding; below 50%, that the economy is generally declining. The distance from 50% is indicative of the strength of the expansion or decline.